

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                 |
| <b>Specificity</b>                                                                                                                                                                                      | Detects endogenous human GRK3 in Western blots.                                       |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2B</sub> Clone # 497018                                     |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                            |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human GRK3<br>Pro469-Leu688<br>Accession # P35626 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm       |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                          |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                       |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

G protein-coupled receptor kinases (GRKs) are important modulators of G protein-coupled receptor (GPCR) signaling. Receptor phosphorylation by specific GRKs plays a key role in triggering rapid desensitization. The GRK family consists of 7 isoforms that share a central catalytic domain with homology to other serine/threonine kinases. The catalytic domain is flanked by an amino-terminal RGS domain of 183-188 amino acids and a carboxyl-terminus of variable length. GRK3 (also known as  $\beta$ -adrenergic receptor kinase 2, or  $\beta$ ARK2) and GRK2 ( $\beta$ ARK1) are members of the  $\beta$ -adrenergic receptor kinase subfamily. GRK3 may phosphorylate  $\alpha$ -synuclein at S129, suggesting a potential involvement for this kinase in Parkinson's disease.

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